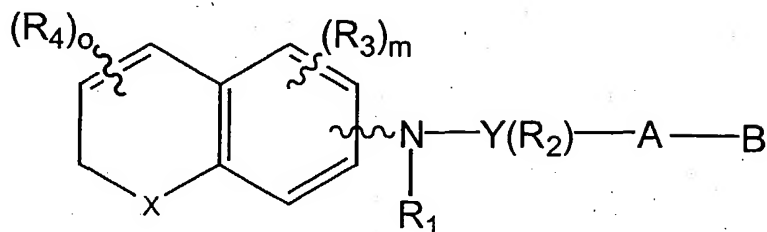


WHAT IS CLAIMED IS:

1. A compound of the formula



where X is O, S, or C(R)₂;

R is H or alkyl of 1 to 6 carbons;

R₁ is H, alkyl of 1 to 10 carbons, alkenyl of 2 to 6 carbons; phenyl-C₁ - C₆ alkyl, or C₁ - C₆-alkylphenyl;

R₂ is H, alkyl of 1 to 6 carbons, F, Cl, Br, I, CF₃, fluoro substituted alkyl of 1 to 6 carbons, alkoxy of 1 to 6 carbons, or alkylthio of 1 to 6 carbons;

R₃ is independently alkyl of 1 to 6 carbons, F, Cl, Br, I, CF₃, fluoro substituted alkyl of 1 to 6 carbons, OH, SH, alkoxy of 1 to 10 carbons, fluoroalkoxy of 1 to 6 carbons, alkylthio of 1 to 6 carbons; benzyloxy, C₁ - C₆ alkyl substituted benzyloxy, halogen substituted benzyloxy, phenyloxy, C₁ - C₆ alkyl substituted phenyloxy, or halogen substituted phenyloxy;

R₄ is independently H, alkyl of 1 to 6 carbons, or F;

Y is a phenyl or naphthyl group, or heteroaryl selected from a group consisting of pyridyl, thienyl, furyl, pyridazinyl, pyrimidinyl, pyrazinyl, thiazolyl, oxazolyl, imidazolyl and pyrazolyl, said phenyl and heteroaryl groups being optionally substituted with one or two R₂ groups;

m is an integer having the values 0 to 3;

o is an integer having the values 0 to 4;

A is (CH₂)_q where q is 0-5, lower branched chain alkyl having 3-6 carbons, cycloalkyl having 3-6 carbons, alkenyl having 2-6 carbons and 1 or 2 double bonds, alkynyl having 2-6 carbons and 1 or 2 triple bonds, and

1 B is hydrogen, COOH, COOR₈, CONR₉R₁₀, -CH₂OH, CH₂OR₁₁,
2 CH₂OCOR₁₁, CHO, CH(OR₁₂)₂, CHOR₁₃O, -COR₇, CR₇(OR₁₂)₂, CR₇OR₁₃O, or
3 tri-lower alkylsilyl, where R₇ is an alkyl, cycloalkyl or alkenyl group
4 containing 1 to 5 carbons, R₈ is an alkyl group of 1 to 10 carbons or
5 trimethylsilylalkyl where the alkyl group has 1 to 10 carbons, or a cycloalkyl
6 group of 5 to 10 carbons, or R₈ is phenyl or lower alkylphenyl, R₉ and R₁₀
7 independently are hydrogen, an alkyl group of 1 to 10 carbons, or a cycloalkyl
8 group of 5-10 carbons, or phenyl or lower alkylphenyl, R₁₁ is lower alkyl,
9 phenyl or lower alkylphenyl, R₁₂ is lower alkyl, and R₁₃ is divalent alkyl
10 radical of 2-5 carbons, or a pharmaceutically acceptable salt of said
11 compound.

12 2. A compound in accordance with Claim 1 where X is C(R)₂.

13 3. A compound in accordance with Claim 1 where the Y group is
14 selected from phenyl, pyridyl, thienyl and furyl.

15 4. A compound in accordance with Claim 1 where X is S.

16 5. A compound in accordance with Claim 1 where X is O.

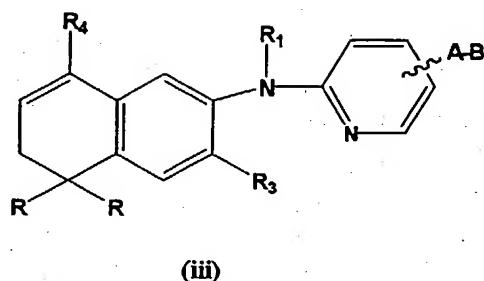
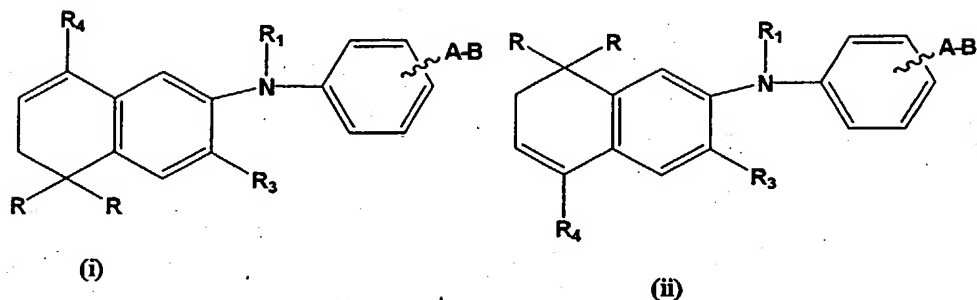
17 6. A compound in accordance with Claim 1 where the A-B group
18 represents (CH₂)_qCOOR₈ or (CH₂)_qCOOH where q is 0, or a
19 pharmaceutically acceptable salt thereof.

20 7. A compound in accordance with Claim 1 where R₁ is alkyl of 1 to
21 10 carbons or alkenyl of 2 to 6 carbons.

22 8. A compound in accordance with Claim 1 where R₄ is independently
23 H or alkyl of 1 to 6 carbons.

24 9. A compound in accordance with Claim 1 where R₁ is alkyl of 1 to
25 10 carbons or alkenyl of 2 to 6 carbons, R₄ is independently H or alkyl of 1 to
26 6 carbons and the A-B group represents (CH₂)_qCOOR₈ or (CH₂)_qCOOH
27 where q is 0, or a pharmaceutically acceptable salt thereof.

10. A compound that has the structure of formula (i), (ii) or (iii)



where **R** is independently H or alkyl of 1 to 6 carbons;

R₁ is H or alkyl of 1 to 10 carbons or alkenyl of 2 to 6 carbons;

R₃ is independently alkyl of 1 to 6 carbons, F, Cl, Br, I, CF₃, fluoro substituted alkyl of 1 to 6 carbons, OH, SH, alkoxy of 1 to 10 carbons, fluoroalkoxy of 1 to 6 carbons, alkylthio of 1 to 6 carbons; benzyloxy, C₁ - C₆ alkyl substituted benzyloxy, halogen substituted benzyloxy, phenoxy, C₁ - C₆ alkyl substituted phenoxy, or halogen substituted phenoxy;

R₄ is H or alkyl of 1 to 6 carbons;

1 A is $(\text{CH}_2)_q$ where q is 0-5, lower branched chain alkyl having 3-6
2 carbons, cycloalkyl having 3-6 carbons, alkenyl having 2-6 carbons and 1 or 2
3 double bonds, alkynyl having 2-6 carbons and 1 or 2 triple bonds, and
4 B is hydrogen, COOH , COOR_8 , $\text{CONR}_9\text{R}_{10}$, $-\text{CH}_2\text{OH}$, $\text{CH}_2\text{OR}_{11}$,
5 $\text{CH}_2\text{OCOR}_{11}$, CHO , $\text{CH}(\text{OR}_{12})_2$, CHOR_{13}O , $-\text{COR}_7$, $\text{CR}_7(\text{OR}_{12})_2$, $\text{CR}_7\text{OR}_{13}\text{O}$, or
6 tri-lower alkylsilyl, where R_7 is an alkyl, cycloalkyl or alkenyl group
7 containing 1 to 5 carbons, R_8 is an alkyl group of 1 to 10 carbons or
8 trimethylsilylalkyl where the alkyl group has 1 to 10 carbons, or a cycloalkyl
9 group of 5 to 10 carbons, or R_8 is phenyl or lower alkylphenyl, R_9 and R_{10}
10 independently are hydrogen, an alkyl group of 1 to 10 carbons, or a cycloalkyl
11 group of 5-10 carbons, or phenyl or lower alkylphenyl, R_{11} is lower alkyl,
12 phenyl or lower alkylphenyl, R_{12} is lower alkyl, and R_{13} is divalent alkyl
13 radical of 2-5 carbons, or a pharmaceutically acceptable salt of said
14 compound.

1 **11.** A compound in accordance with Claim 10 that has the structural
2 formula (i).

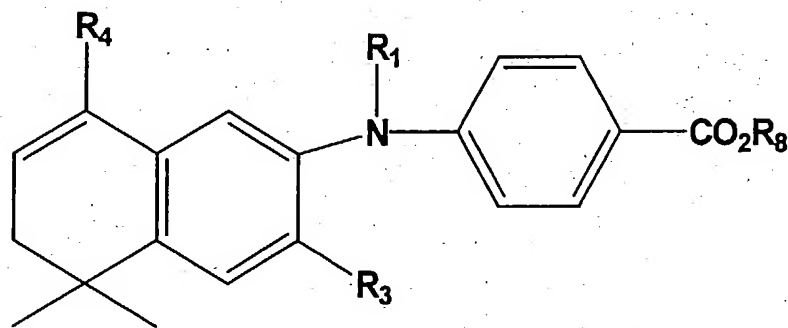
3 **12.** A compound in accordance with Claim 10 that has the structural
4 formula (ii).

5 **13.** A compound in accordance with Claim 10 that has the structural
6 formula (iii).

7 **14.** A compound in accordance with Claim 10 where R_4 and R_1 both
8 are alkyl.

9 **15.** A compound in accordance with Claim 10 where the A-B group
10 represents $(CH_2)_qCOOR_8$ or $(CH_2)_qCOOH$ where q is 0, or a
11 pharmaceutically acceptable salt thereof.

12 **16.** A compound of the formula



23 where R_1 is alkyl of 1 to 6 carbons or alkenyl of 2 to 6 carbons;

24 R_3 is H, alkyl of 1 to 6 carbons, OH, or alkoxy of 1 to 10 carbons,
25 benzyloxy; or $C_1 - C_6$ alkyl substituted benzyloxy;

26 R_4 is alkyl of 1 to 6 carbons, and

27 R_8 is H or alkyl of 1 to 6 carbons, or a pharmaceutically acceptable salt
of said compound.

1 17. A compound in accordance with Claim 16 where R_4 is methyl,
2 ethyl, *iso*-propyl or *tertiary*-butyl.

3 18. A compound in accordance with Claim 16 where R_1 is methyl,
4 ethyl, *n*-propyl, allyl, or cyclopropylmethyl.

5 19. A compound in accordance with Claim 16 where R_3 is H, methyl,
6 ethyl, *n*-propyl, *iso*-propyl, methoxy, ethoxy, *n*-propyloxy, *iso*-propyloxy, *n*-
7 butoxy, *n*-hexyloxy, *n*-heptyloxy, benzyloxy, 4-methylbenzyloxy, or 2,4-di-*t*-
8 butylbenzyloxy.

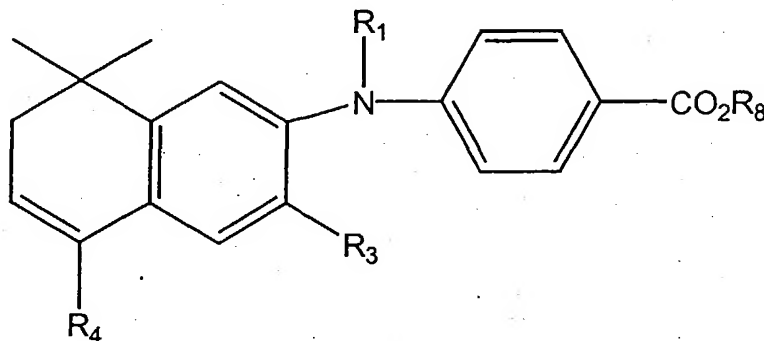
9 20. A compound in accordance with Claim 16 where R_1 is methyl,
10 ethyl, *n*-propyl, allyl, or cyclopropylmethyl;

11 R_3 is H, methyl, ethyl, *n*-propyl, *iso*-propyl, methoxy, ethoxy, *n*-
12 propyloxy, *iso*-propyloxy, *n*-butoxy, *n*-hexyloxy, *n*-heptyloxy, benzyloxy, 4-
13 methylbenzyloxy, or 2,4-di-*t*-butylbenzyloxy, and

14 R_4 is methyl, ethyl, *iso*-propyl or *tertiary*-butyl.

1 21. A compound in accordance with Claim 20 where R_8 is H or ethyl.

2 22. A compound of the formula



11 where R_1 is alkyl of 1 to 6 carbons or alkenyl of 2 to 6 carbons;

12 R_3 is H, alkyl of 1 to 6 carbons, OH, or alkoxy of 1 to 10 carbons, or
13 benzyloxy;

14 R_4 is alkyl of 1 to 6 carbons, and

15 R_8 is H or alkyl of 1 to 6 carbons, or a pharmaceutically acceptable salt
16 of said compound.

17 23. A compound in accordance with Claim 22 where R_4 is methyl,
18 ethyl, *iso*-propyl or *tertiary*-butyl.

19 24. A compound in accordance with Claim 22 where R_1 is methyl,
20 ethyl, *n*-propyl, allyl, or cyclopropylmethyl.

21 25. A compound in accordance with Claim 22 where R_3 is H, methyl,
22 ethyl, *n*-propyl, *iso*-propyl, benzyloxy, methoxy, ethoxy, *n*-propyloxy, *iso*-
23 propyloxy, *n*-hexyloxy, or *n*-heptyloxy.

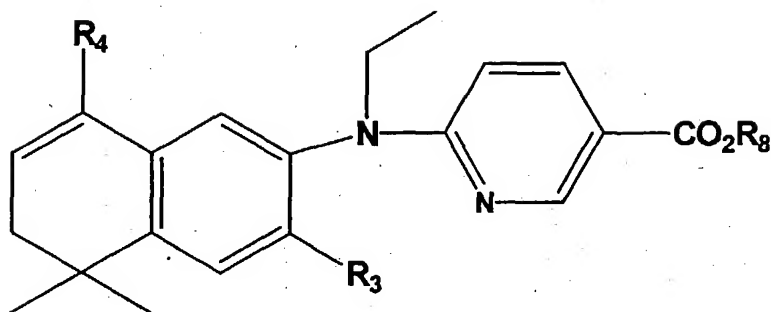
24 26. A compound in accordance with Claim 22 where R_1 is methyl,
25 ethyl, *n*-propyl, allyl, or cyclopropyl methyl;

26 R_3 is H, methyl, ethyl, *n*-propyl, *iso*-propyl, benzyloxy, methoxy,
27 ethoxy, *n*-propyloxy, *iso*-propyloxy, *n*-hexyloxy or *n*-heptyloxy, and

28 R_4 is methyl, ethyl, *iso*-propyl or *tertiary*-butyl.

29 27. A compound in accordance with Claim 26 where R_8 is H or ethyl.

1 28. A compound of the formula



11 where R_3 is H, or alkyl of 1 to 6 carbons;

12 R_4 is alkyl of 1 to 6 carbons, and

13 R_8 is H or alkyl of 1 to 6 carbons, or a pharmaceutically acceptable salt
14 of said compound.

15 29. A compound in accordance with Claim 28 where R_4 is methyl,
16 ethyl, *i*-propyl or *t*-butyl.

17 30. A compound in accordance with Claim 28 where R_3 is H, or *n*-
18 butyloxy.

19 31. A compound in accordance with Claim 28 where R_8 is H or ethyl.

20 32. A compound in accordance with Claim 28 where R_4 is methyl,
21 ethyl, *i*-propyl or *t*-butyl;

22 R_3 is H, or *n*-butyloxy, and R_8 is H or ethyl.

23 33. A compound in accordance with Claim 32 where R_8 is H or ethyl.